Mr. H. J. Carter on a Lacustrine Bryozoon allied to Flustra. 169

of fibres; each fasciculus is twisted together near its centre; these, some of them being larger than others, star the structure thickly, and still more plentifully where the white excressences appear.

I am not prepared to state that this case was built by the animal, and some have suggested that it may be one of the *Medusæ*; but the microscopic structure appears to negative this latter idea.

That it is the nest in which the animal dwelt appears certain, but how it was constructed we have no information to guide us; still it is not at all improbable that there are many processes in the lower forms of life that have not yet been made known, some of which may be even more astonishing than the supposed fact, that an animal whose constant habit is to dwell within the protecting walls of another, can, upon being expelled by accident from its usual abode, secrete a substance that will protect it from external injury, and, as far as may be, fulfil the conditions of its normal position.

#### EXPLANATION OF PLATE VIII.

Fig. 1. Case of Siphonocetus typicus, enlarged (after Kröyer).

Fig. 2. Tubes of Siphonocetus crassicornis on Antennularia, enlarged.

Fig. 3. Nests of Podocerus pulchellus on Laomedea, enlarged.

Fig. 4. Nests of Podocerus fucicola? on Ulva and Tubularia.

Fig. 5. Nests of Amphitoë rubricata at the root of Laminaria.

Fig. 5 a. Microscopic structure of the same.

Fig. 6. Supposed nest of Phronima.

Fig. 6 a. Microscopic structure of the same.

# XVII.—Description of a Lacustrine Bryozoon allied to Flustra. By H. J. CARTER, Esq., H.C.S. Bombay.

### [With a Plate.]

THE following is a description of a polypidom which was sent to me by the Rev. S. Hislop, who found it for the first time in April last, growing plentifully on *Paludina Bengalensis* and the stems of aquatic plants, in a freshwater tank and adjoining well at Nagpoor, in Central India. So far as I am aware, it will form the first on record of a freshwater species of this kind of Bryozoon; and being encrusting and without calcareous matter in the skeleton, it will also afford the type of a new genus at least, for which I propose the name *Hislopia*, in honour of the reverend gentleman above mentioned, to whose acute observation and intelligence we are indebted not only for its discovery, but, in conjunction with his late colleague, the Rev. R. Hunter, for

### 170 Mr. H. J. Carter on a Lacustrine Bryozoon allied to Flustra.

those of fossil remains as yet unparalleled in interest and number in Indian geological research.

It differs from *Flustra* in the form and arrangement of the cells, and in not being erect; and from *Membranipora* and *Lepralia* in not being calcareous; but it agrees with *Flustra* in the latter character, and with *Lepralia* in being decumbent,—especially with that subdivision which has oral spines without other external appendages.

Fortunately the wet specimens that have reached me have arrived in a condition sufficiently preserved to admit of my describing, with the polypary or skeleton, the animal also, which, under the designation of *lacustris*, will stand as follows :---

# Hislopia lacustris, H. J. C., n. sp. Pl. VII. figs. 1-3.

Polypary kerato-membranous, without admixture of calcareous matter. Cells irregularly ovate, compressed, spreading in aggregation over smooth surfaces, sometimes linearly, but for the most part with no definite arrangement. Aperture subquadrangular, supported on a circular neck, closed by four triangular valves, of which the posterior is the largest, and partially overlaps the rest; surrounded by a horny raised border, from the angles of which respectively four spines project; posterior border less prominent than the rest, which permits of an almost uninterrupted continuation between the larger valve or lip and the membranous portion of the cell. Margin of the cell horny, pierced by 2-4 stoloniferous holes. Average greatest length and breadth of the cell 1-29th and 1-38th of an inch respectively.

Hab. Freshwater tanks which are never dry, on Paludina bengalensis and the stems of aquatic plants.

Loc. Nagpoor in Central India.

Animal.—Contained in a membranous sac, which lines the cell, and communicates with 2-4 adjoining cells by stolons through the holes mentioned : viz. posteriorly with the mother-, and anteriorly and antero - laterally with 1-3 daughter-cells. Mouth triangular, bordered by the valves mentioned, leading into a delicate, transparent, buccal sheath, plaited anteriorly, at the bottom of which (when inverted) is the orifice of the throat surrounded by 16 (?) tentacula. Pharynx pyriform, presenting a layer of cells or follicles internally, extending to the commencement of the œsophagus, which is narrow, long, and bent upon itself. Œsophagus followed by a dilated, globular portion, called the 'gizzard,' which is thick-coated, presenting two linear, horny bodies internally, and opening

